

AMENDMENTS TO THE CLAIMS:

Claims 1-11 (canceled)

Claim 12 (currently amended): A photoelectric sensor comprising:
an emitting device for emitting light pulses repeatedly to a target area; and
a receiving device for receiving said light pulses arriving through said target area,
said receiving device including converting means having an output line for converting the
received light pulses into electrical pulses;

said emitting device including pulse transmitting means for transmitting said light
pulses according to an emission bit pattern based on arrangement of bits each indicating
emission and non-emission of light, respectively;

said receiving device including:

bit generating means for generating light indicating bits each indicative of whether or
not an electrical pulse appeared on said output line of said converting means; and

bit pattern judging means for making a comparison comparisons simultaneously
between a received bit pattern based on said light indicating bits and a two or more standard
bit pattern patterns based on said emission bit pattern and judging from the result of said
comparison comparisons whether a light pulse emitted from said emitting device has been
normally received;

said photoelectric sensor generating an output signal on the basis of result of judging
by said bit pattern judging means.

Claim 13 (canceled)

Claim 14 (original): The photoelectric sensor of claim 12 wherein said emitting
device further includes means for generating randomly said emission bit pattern.

Claims 15-16 (canceled)

Claim 17 (original): The photoelectric sensor of claim 12 wherein said bit pattern judging means makes said comparison with redundancy.

Claim 18 (original): The photoelectric sensor of claim 12 wherein said emission bit pattern includes at least two bits in a row indicating emission.

Claim 19 (original): The photoelectric sensor of claim 12 wherein the number of bits in said emission bit pattern is variable.

Claim 20 (original): The photoelectric sensor of claim 12 wherein the length of bit in said emission bit pattern is variable.